Prepared (also subject responsible if other)		No.		
ETH/RZD Szalai Gábor +36 1 437 7591		155 17-CNL 113 352 Uen		
Approved	Checked	Date	Rev	Reference
ETH/RZX (dr. Gyorgy Rethy)		2004-04-22	A	GASK2

MIME Protocol Modules for TTCN-3 Toolset with TITAN, Function Specification

Contents

Prepared (also subject responsible if other)		No.			
ETH/RZD Szalai Gábor +36 1 437 7591		155 17-CNL 113 352 Uen			
Approved	Checked	Date	Rev	Reference	
ETH/RZX (dr. Gyorgy Rethy)		2004-04-22	A	GASK2	

1 Introduction

1.1 Revision history

Date	Rev	Characteristics	Prepared
2004-02-18	PA1	First draft version	ETHGASZ
2004-04-22	A	Final revision	ETHGASZ

1.2 How to Read this Document

This is the Function Specification for the set of MIME protocol modules. MIME protocol modules is developed for the TTCN-3 Toolset with TITAN. This document should be read together with Product Revision Information [3].

1.3 Scope

The purpose of this document is to specify the content of the MIME protocol modules.

1.4 References

[1]   ETSI ES 201 873-1 v.2.2.1 (02/2003)
        The Testing and Test Control Notation version 3. Part 1: Core
        Language

[2]   1/1553-CRL 113 200 Uen
        User Documentation for the TITAN TTCN-3 Test Executor

[3]   109 21-CNL 113 352-1
        MIME Protocol Modules for TTCN-3 Toolset with TITAN, Product
        Revision Information

[4]   IETF RFC 2045
        Multipurpose Internet Mail Extension (MIME) Part One:
        Format of Internet Message Body

[5]   IETF RFC 2046
        Multipurpose Internet Mail Extension (MIME) Part Two:
        Media Types

1.5 Abbreviations

ASP   Abstract Service Primitive

IUT   Implementation Under Test

MIME   Multipurpose Internet Mail Extension

SUT   System Under Test

TTCN-3   Testing and Test Control Notation version 3

1.6   Terminology

No specific terminology is used.

2   General

Protocol modules implement the message structures of the related protocol in a formalized way, using the standard specification language TTCN-3. This allows defining of test data (templates) in the TTCN-3 language [1] and correctly encoding/decoding messages when executing test suites using the Titan TTCN-3 test environment.

3   Functional specification

3.1   Protocol version implemented

This set of protocol modules implements protocol messages and constants of the MIME protocol (see [5] [6]) with the modifications specified in 3.2.

3.2   Modifications/deviations related to the protocol specification

3.2.1   Implemented Messages, Content types, Content encodings and Constants

The following Content encodings are implemented from [5], [6]: Base64, binary, 7bit and 8bit. The quoted-printable encoding is not implemented.

3.2.2   Protocol Modifications/Deviations

The quoted-printable encoding is not implemented.

3.3   Encoding/Decoding and Other Related Functions

This product also contains encoding/decoding functions, which assure correct encoding of messages when sent from Titan and correct decoding of messages when received by Titan. Implemented encoding/decoding functions:

Name   Type of formal parameters   Type of return value
f_MIME_Encode (in PDU_MIME_entity) returns charstring

f_MIME_Decode(in charstring) return PDU_MIME_entity;